

**TIIAP FY99
Project Narrative**

University of Alaska Southeast
Grant # 02-60-99038
Education, Culture and Lifelong Learning
Ketchikan, Alaska



UAS

University of Alaska
Southeast
Ketchikan, Alaska

Telecommunications and Information Infrastructure Assistance Program
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue, NW
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Washington, D.C. 20230

Executive Summary

Southern Southeast Alaska is one of the more isolated regions of the nation's largest geographical state. The region is comprised of rugged mountainous mainland and archipelago about midway between Seattle, Washington and Anchorage, Alaska, adjacent to the border with Canada.

The population of the region totals 21,293. Much of this population is Alaska Native. Industries of the region traditionally have been timber, fishing, mining and maritime-related.

The region's population center is the City of Ketchikan. Institutions in Ketchikan serve the populations of the Ketchikan, Gateway Borough, the Native American reservation on Annette Island'. cities of Craig, Hydaburg, Klawock and Throne Bay and many unorganized towns, villages and logging camps on Prince of Wales Island and the Alaskan mainland.

Institutions in Ketchikan provide educational and health-related services to residents in the more remote locations. Ketchikan has a campus of the University of Alaska Southeast, a fully accredited post-secondary institution.

Recipients of services usually must travel- to Ketchikan by costly and unpredictable airline service. Presently this greatly restricts residents from the outlying areas of the region.

The University of Alaska Southeast - Ketchikan campus proposes to provide improved telecommunications delivery of information in education, health, maritime and general business topics. The University proposes to install new telecommunications hardware, software and connectivity, allowing for greatly improved distance delivery of education and improved information access. The proposal asks for a TIIAP grant of \$113,404 for the first year, matched by the University with \$116,727. The total project cost would be \$230,131.

Communication in an Isolated Corner of America

Southern Southeast Alaska is a remote rural part of the United States, about midway between Seattle, Washington, and Anchorage, Alaska. The region is adjacent to the northwest border of British Columbia, Canada. Southern Southeast Alaska is an area of about 15,000 square miles of land and water. Geographically it is rugged mountainous mainland and archipelago.

The region's major divisions are:

- Ketchikan Gateway Borough located on Revillagigedo Island. Native Alaskan (Tsimshian) reservation of Annette Island with most of its population in the city of Metlakatla.
- Prince of Wales Island with several small cities, towns and villages.
- Unorganized state of Alaska areas with small towns, villages, and logging and fishing camps on smaller islands and the Alaskan mainland.

The region's population totals 21,293. The largest population division of the region is the city of Ketchikan with 8,552 residents, according to state of Alaska Department of Labor 1997 estimate. The city of Ketchikan serves as regional center for the remainder of Southern Southeast Alaska.

Other major population divisions in the region (all based on Alaska DOL 1997 estimates) are:

- Ketchikan Gateway Borough (excluding city of Ketchikan) — 6,047
- Annette Island (city of Metlakatla) — 1,528
- Prince of Wales Island — 5,099

There is a significant Native American population in the region. Within Ketchikan Gateway Borough is the city of Saxman which (by Alaska DOL definition and 1997 estimate) is an Alaska Native Village Statistical Area. It has a population of 381. Overall, the Ketchikan Gateway Borough has a 13.5 percent Native American population. On Prince of Wales Island the cities of Craig (pop. 2,043), Hydaburg (pop. 398) and Klawock (pop. 704) also are considered by the state to be Alaska Native Village Statistical Areas. Overall, Prince of Wales Island Annette Island has a 43.5 percent Native American population. The Native American populations are either Tlingit or Haida, except for the Tsimshian reservation on Annette Island.

While islands (Annette, Prince of Wales and Revillagigedo) with larger populations have roads, there are no bridge connections between islands. Inter-island transportation within the region can be accomplished only by sporadic ferry service or by expensive floatplanes flying during good weather conditions only. For example, it is only a 35-minute flight covering 52 statute miles between Ketchikan and Craig on Prince of Wales Island but it costs \$162.80 lowest standard fare for the round-trip flight in the typical commuter floatplane. Southeast Alaska's weather frequently grounds these small aircraft.

This unreliable transportation means traveling for educational and cultural classes and events is expensive and frequently interrupted during much of the year and leads to a sense of isolation among the region's population.

Traditional primary private-sector industries of the area have been timber and fishing. Tourism has been the growth industry in recent years. With all government agencies combined, public-sector employment is significant in the region, particularly in the city of Ketchikan.

As the regional center, the city of Ketchikan is the location for many local, state and federal agencies serving rural Alaska. This includes the University of Alaska Southeast - Ketchikan campus, an extended site of the fully accredited University of Alaska; and Coast Guard Base Ketchikan. In addition, the city of Ketchikan owns Ketchikan General Hospital, a 50-bed facility operated by a nonprofit organization.

The University of Alaska Southeast - Ketchikan campus is tasked by the University of Alaska State System to serve the Southern Southeast Alaska region (see Mission Statement in appendix). The Ketchikan campus provides business, education, health, human services, maritime and other industrial classes for the region on a regular basis. The campus has an unduplicated head count of about 750 students per semester.

However, expensive transportation and difficult logistical considerations (e.g., infrequent ferry schedules, bad weather cancellations of floatplane flights) presently pose barriers to the region's residents seeking post-secondary education, except those who reside in or near the city of Ketchikan. During academic year 1998-99, only 2.77 percent of the Ketchikan campus enrollment resided on Annette or Prince of Wales Island.

Aside from the difficulty and great expense of island residents commuting to Ketchikan for post-secondary education, the small island communities do not presently have the resources for receiving much "distance-delivery" education.

Some Remedy to Isolation

With telecommunications hardware, software and connectivity appropriate to the Telecommunications and Information Infrastructure Assistance Program grant and described in this grant application, the University of Alaska Southeast - Ketchikan campus can greatly enhance its ability to serve Annette and Prince of Wales Islands by improving the quality of its distance-delivery classes. It would allow Ketchikan campus to work much more collaboratively with K-12 school systems on those Islands.

Some examples of Ketchikan campus classes that might be held at remote locations are in the business, health care and human services and maritime areas.

In the business area, the Ketchikan campus faculty already successfully teaches classes in Principles of Financial Accounting, Managerial Accounting, Computer Automated Accounting and Small Business Management for distance delivery throughout the state of Alaska. However, present telecommunications connectivity limit access of these classes within the Ketchikan campus service area. Telecommunications hardware, software and connectivity improvement as requested below would enhance educational service to these areas.

In the health care and human services area, there presently in Ketchikan exists classes or programs for Certified Nurse's Assistant, Personal Care Attendant, Emergency Medical Technician, Medical Office Associate Degree, Health Care Specialist and Medical Transcription. Ketchikan campus anticipates that it will offer a Licensed Practical Nurse program in the near future. With improved telecommunications hardware, software and connectivity to Annette and Prince of Wales Islands, the full Personal Care Attendant and the didactics of Certified Nurse's Assistant and Emergency Medical Technician and possibly other classes noted above could be offered at communities on those islands.

In its maritime program, the University of Alaska Southeast -Ketchikan campus presently offers a wide variety of U.S. Coast Guard-approved classes in Ketchikan. This includes a class that prepares students for testing for the 100 Gross Ton Master's License. This license is required for vessels ubiquitous in the region (e.g., tug/tow boats, charter vessels, general transportation vessels). This class could be delivered by distance to all of the small communities that are very dependent on maritime industries. If successful, additional effort would be made to develop and deliver other courses including a similar course for the 200 Gross Ton Master's License, a size of vessel of increasing importance throughout the region.

If the improved telecommunications hardware, software and connectivity requested in the grant is installed, University of Alaska Southeast - Ketchikan campus could deliver to the high schools in communities on Annette and Prince of Wales Island classes that they now cannot offer due to too-low enrollments. Examples are calculus and advanced-placement English.

Additionally, there will be improved information exchange outside of organized classes.

For example, public and school libraries in Ketchikan already have a combined catalogue. By extending the catalogue to the public and school libraries on Annette and Prince of Wales Islands, through improved telecommunications, residents of Southern Southeast Alaska can have greatly expanded library services.

Local, state and federal government officials of the region periodically meet to discuss common concerns. The improved telecommunications hardware, software and connectivity would allow for more communication capabilities while reducing cost and time for travel.

Cultural collection and exchange will be greatly enhanced in the region with the telecommunications hardware, software and connectivity

noted below. With improved two-way telecommunications, residents on the islands can provide expertise in their specialized areas. A primary example would be Native Americans providing village and tribal history and culture from their more remote areas presently less affected by outside influences. These could be valuable additions to the collections at the city of Ketchikan's Totem Heritage Center, a major cultural facility of the region.

The Requested System

With a Telecommunications and Information Infrastructure Assistance Program grant, the University of Alaska Southeast - Ketchikan campus proposes to install and administer telecommunications hardware, software and connectivity to better deliver classes and other information access to two of the region's more outlying communities during the first year of the grant. These sites would be on Annette Island (in the city of Metlakatla) and on Prince of Wales Island (city of Thorne Bay). If successful, a third site (probably in the city of Craig) would be installed in a subsequent year.

The proposal asks for a TIIAP grant of \$113,404 for the first year, matched by the University with \$116,727. The total project cost would be \$230,131.

The first year's expenses would include purchase of most of the equipment. We propose to purchase specific new software and hardware capable of delivering the education and other information access noted above. We propose to contract for enhanced capacities from the region's telephone utilities to deliver information via video, voice and Internet as appropriate.

The software will be the Net Meeting software.

Hardware will include computers, routers, CSUDSU, IP telephone, IP/TV server, camera, data conferencing system, electronic whiteboard, and data security separation "firewall" for the University. A more detailed listing of equipment and proposed locations are included *in* the budget section of this grant request.

All of the software and hardware proposed are established products, greatly minimizing project failure due to untested components.

Contractual expenses of new equipment installation, technical support and system evaluation are anticipated and enumerated in the budget summary section.

Ongoing telecommunication line charges also are anticipated and enumerated in the budget summary section.

- Regarding personnel, a part-time (40 percent) Project Director will oversee the project. University faculty and administrative support are anticipated and enumerated in the budget summary section.

A timeline for the grant is included in the appendices. It calls for at least 105 days of information delivery during the first year.

Subsequent years would include contractual and ongoing expenses (e.g., line charges, personnel costs). A third site, on Prince of Wales Island, likely would be

established during a second grant year with some costs for equipment and possible additional line charges.

If the expanded telecommunications capabilities prove to be as valuable as anticipated, after the grant period participating communities and the University will incorporate ongoing expenses into their operating budgets.

The University of Alaska Southeast - Ketchikan campus believes that rural southern Southeast Alaska is an under-served region of the nation and this proposed project is exactly the type of project envisioned for funding by a Telecommunications and Information Infrastructure Assistance Program grant